

PTO/SB/21 (08-03)

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<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	Application Number	10/706,645
	Filing Date	November 12, 2003
	First Named Inventor	Charles R. Rapier
	Art Unit	*
	Examiner Name	*
Total Number of Pages in This Submission	Attorney Docket Number	1856-42801(40183)

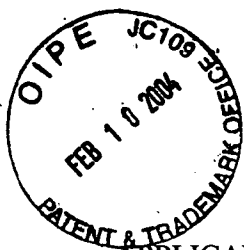
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<input type="checkbox"/> Fee Transmittal Form  <input type="checkbox"/> Fee Attached  <input type="checkbox"/> Amendment/Reply  <input type="checkbox"/> After Final  <input type="checkbox"/> Affidavits/declaration(s)  <input type="checkbox"/> Extension of Time Request  <input type="checkbox"/> Express Abandonment Request  <input checked="" type="checkbox"/> Information Disclosure Statement  <input type="checkbox"/> Certified Copy of Priority Document(s)  <input type="checkbox"/> Response to Missing Parts/ Incomplete Application  <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s)  <input type="checkbox"/> Licensing-related Papers  <input type="checkbox"/> Petition  <input type="checkbox"/> Petition to Convert to a Provisional Application  <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address  <input type="checkbox"/> Terminal Disclaimer  <input type="checkbox"/> Request for Refund  <input type="checkbox"/> CD, Number of CD(s)	<input type="checkbox"/> After Allowance Communication to Group  <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences  <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)  <input type="checkbox"/> Proprietary Information  <input type="checkbox"/> Status Letter  <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Form PTO-1449 (4 p.); THIRTY- NINE (39) Cited References; and acknowledgement postcard
Remarks		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT			
Firm Or Individual Name	Jeffrey L. Johnson 53,078		
Signature			
Date	February 4, 2004		
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119125.01/1856.42801

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:	Charles R. Rapier et al.	§	GROUP ART UNIT:
		§	
SERIAL NO.:	10/706,645	§	
		§	EXAMINER:
FILED:	November 12, 2003	§	
		§	
FOR:	Stabilized Alumina Supports, Catalysts Made	§	
	Therefrom, And Their Use In Partial Oxidation	§	

INFORMATION DISCLOSURE STATEMENT

Atty. Dkt. No.: 1856-42801(40183)

Date: February 4, 2004

Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

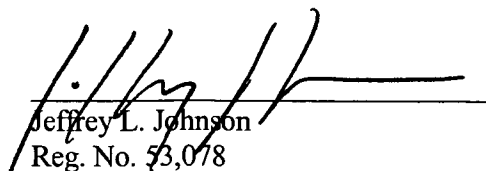
Sir:

This Information Disclosure Statement, including completed Form PTO-1449, comprises a list of pertinent art of which Applicants are aware. If this application was filed prior to June 30, 2003, a copy of each publication listed on Form PTO-1449 is enclosed herewith.

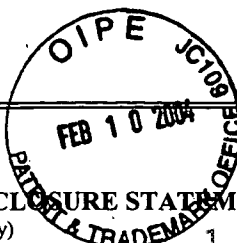
The submission of this Information Disclosure Statement and the references submitted therewith is not an admission that the art cited is "prior" with respect to the present invention, nor is it a representation, that no better art exists. Applicants hereby reserve the right to swear behind or otherwise disprove any alleged "prior" nature of any art cited should the facts support and the situation warrant such an action. It is submitted that the art cited does not constitute a bar to the patentability of Applicants' invention under 35 U.S.C. § 102 or § 103.

As this Information Disclosure Statement is being filed pursuant to 37 C.F.R. § 1.97(b), no certification or fee is required.

Respectfully submitted,



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ATTORNEY/AGENT FOR APPLICANT



Form PTO-1449 (Modified) <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (Use several sheets if necessary) <div>1 of 4</div>	Atty. Docket No. 1856-42801 (40183)	Serial No. 10/706,645
	Applicant Charles R. Rapier et al.	
	Filing Date November 12, 2003	Group

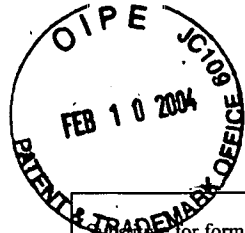
REFERENCE DESIGNATION U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB-CLASS	FILING DATE IF APPROPRIATE
	AA	3752775	08/14/1973	Yamaguchi et al.	252	464	
	AB	4537873	08/27/1985	Kato et al.	502	242	
	AC	4585752	04/29/1986	Ernest	502	314	
	AD	4738946	04/19/1988	Yamashita et al.	502	303	
	AE	4793797	12/27/1988	Kato et al.	143	7	
	AF	4961786	10/09/1990	Novinson	106	692	
	AG	5837634	11/17/1998	McLaughlin et al.	501	127	
	AH	6399528	06/04/2002	Krell et al.	501	80	03/05/2001
	AI	2003/0032554	02/13/2003	Park et al.	502	302	05/13/2002

FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB-CLASS	Translation YES NO

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)		

EXAMINER /Paul Wartalowicz/	DATE CONSIDERED 11/22/2010
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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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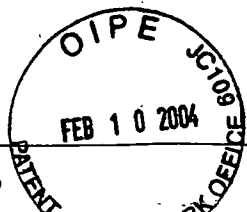
Application Number	10/706,645
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First Named Inventor	Charles R. Rapier
Group Art Unit	
Examiner Name	
Attorney Docket Number	1856-42801(40183)

Sheet	2	of	4
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## OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate) title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issued number(s), publisher, city and/or country where published.	T <sup>2</sup>
	AJ	Amato et al., <i>Sintering of Pelleted Catalysts for Automotive Emission Control</i> , pp. 187-197 (1975)	
	AK	Arai et al., <i>Recent Progress in High-Temperature Catalytic Combustion</i> , Catalysis Today, 10 (1991) pp. 81-94	
	AL	Arai et al., <i>Thermal Stabilization of Catalyst Supports and their Application to High-Temperature Catalytic Combustion</i> , Applied Catalysis A: General 138 (1996) pp. 161-176	
	AM	Artizzu-Duart et al, <i>Catalytic Combustion of Methane on Substituted Barium Hexaaluminates</i> , Catalysis Today 59 (2000) pp. 163-177	
	AN	Beguín et al., <i>Stabilization of Alumina by Addition of Lanthanum</i> , Applied Catalysis 75 (1991) pp. 119-132	
	AO	Bish et al., <i>Quantitative Phase Analysis Using the Rietveld Method</i> , J. Appl. Cryst. (1998) 21, pp. 86-91	
	AP	Cai et al., <i>Atomic Scale Mechanism of the Transformation of <math>\gamma</math>-Alumina to <math>\alpha</math>-Alumina</i> , Physical Review Letters, Vol. 89, No. 23, (12/02/2002) pp. 235501-1 – 235501-4	
	AQ	Chen et al., <i>High Temperature Thermal Stabilization of Alumina Modified by Lanthanum Species</i> , Applied Catalysis A: General 205 (2001) pp. 159-172	
	AR	Dexpert-Ghys, <i>Optical and Structural Investigation of the Lanthanum <math>\beta</math>-Alumina Phase Doped with Europium</i> , Journal of Solid State Chemistry 19, (1976) pp. 193-204	
	AS	Farrington et al., <i>The Lanthanide <math>\beta''</math> Alumina</i> , Applied Physics A 32 (1983) pp. 159-161	
	AT	Groppi et al., <i>Preparation and Characterization of Hexaaluminate-Based Materials for Catalytic Combustion</i> , Applied Catalysis A: General, 104 (1993) pp. 101-108	
	AU	Jang et al., <i>Catalytic Oxidation of Methane Over Hexaaluminates and Hexaaluminate-Supported Pd Catalysts</i> , Catalysis Today 47 (1999) pp. 103-113	
	AV	Johansson et al., <i>Development of Hexaaluminate Catalysts for Combustion of Gasified Biomass in Gas Turbines</i> , Journal of Engineering for Gas Turbines and Power, Vol. 124 (04/2002) pp. 235-238	
	AW	Kato et al., <i>Preparation of Lanthanum <math>\beta</math>-Alumina with High Surface Area by Coprecipitation</i> , Journal of the American Ceramic Society, 70 [7] (07/1987) pp. C-157-159	
	AX	Levy et al., <i>The Effect of Foreign Ions on the Stability of Activated Alumina</i> , Journal of Catalysis 9 (1967) pp. 76-86	

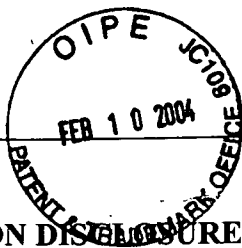
Examiner Signature	/Paul Wartalowicz/	Dated Considered	11/22/2010
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		Application Number	10/706,645		
		Filing Date	November 12, 2003		
		First Named Inventor	Charles R. Rapier		
		Group Art Unit			
Examiner Name					
Sheet	3	of	4	Attorney Docket Number	1856-42801(40183)

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate) title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issued number(s), publisher, city and/or country where published.	T <sup>2</sup>
	AY	Liu et al., <i>Partial Oxidation of Methane over Nickel Catalysts Supported on Various Aluminas</i> , Korean Journal of Chemical Engineering 19 (5) pp. 735-741 (2002)	
	AZ	Liu et al., <i>Partial Oxidation of Methane over Ni/Ce-ZrO<sub>2</sub>/0-Al<sub>2</sub>O<sub>3</sub></i> , Korean Journal of Chemical Engineering 19(5) pp. 742-748 (2002)	
	BA	Machida et al., <i>Effect of Additives on the Surface Area of Oxide Supports for Catalytic Combustion</i> , Journal of Catalysts 103 (1987) pp. 385-393	
	BB	Machida et al., <i>Analytical Electron Microscope Analysis of the Formation of BaO – 6Al<sub>2</sub>O<sub>3</sub></i> , Journal of American Ceramic Society 71[12] pp. 1142-47 (1988)	
	BC	Machida et al., <i>Effect of Structural Modification on the Catalytic Property of Mn-Substituted Hexaaluminates</i> , Journal of Catalysis 123 (1990) pp. 477-785	
	BD	Matsuda et al., <i>8th International Congress on Catalysis Volume IV: Impact of Surface Science on Catalysis Structure-Selectivity/Activity Correlations New Routes for Catalyst Synthesis (pp. IV-879-889)</i>	(1984)
	BE	Miao et al., <i>Partial Oxidation of Methane to Syngas over Nickel-Based Catalysts Modified by Alkali Metal Oxide and Rare Earth Metal Oxide</i> , Applied Catalysts A: General 154 (1997) pp. 17-27	
	BF	Nair et al., <i>Pore Structure Evolution of Lanthana-Alumina Systems Prepared through Coprecipitation</i> , Journal of American Ceramic Society 83[8] (2000) pp. 1942-1946	
	BG	Oudet et al., <i>Thermal Stabilization of Transition Alumina by Structural Coherence with LnAlO<sub>3</sub> (Ln = La, Pr, Nd)</i> , Journal of Catalysis 114, (1998) pp. 112-120	
	BH	Rahkeev et al., <i>Transition Metal Atoms on Different Alumina Phases: The Role of Subsurfaces Sites on Catalytic Activity</i> , Physical Review B 67, 115414 (2003) pg. 4	
	BI	Rietveld, <i>A Profile Refinement Method for Nuclear and Magnetic Structures</i> , Journal of Appl. Cryst. (1969) 2, pp. 65-71	
	BJ	Roh et al., <i>Partial Oxidation of Methane over Ni/0-Al<sub>2</sub>O<sub>3</sub> Catalysts</i> , Chemistry Letters 2001 (pp. 666-667) (2001)	
	BK	Santos et al., <i>Standard Transition Aluminas, Electron Microscopy Studies</i> , Materials Research, Vol. 3 No. 4 (2000) pp. 104-114	
	BL	Schaper et al., <i>The Influence of Lanthanum Oxide on the Thermal Stability of Gamma Alumina Catalyst Supports</i> , Applied Catalysis 7 (1983) pp. 211-220	
	AM	Schaper et al., <i>Thermal Stabilization of High Surface Area Alumina</i> , Solid State Ionics 16 (1985) pp. 261-266	
	AN	Seo et al., <i>Experimental and Numerical Studies on Combustion Characteristics of a Catalytically Stabilized Combustor</i> , Catalysis Today 59 (2000) pp. 75-86	

Examiner Signature	/Paul Wartalowicz/	Dated Considered	11/22/2010
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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

**Complete if Known**

Application Number	10/706,645
Filing Date	November 12, 2003
First Named Inventor	Charles R. Rapier
Group Art Unit	
Examiner Name	
Attorney Docket Number	1856-42801(40183)

Sheet 4 of 4

**OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate) title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, page(s), volume-issued number(s), publisher, city and/or country where published.	T <sup>2</sup>
	BO	Russell et al., <i>Thermal Transformations of Aluminas and Alumina Hydrates</i> , Industrial and Engineering Chemistry Vol. 42, No. 7 (1950) pp. 1398-1403	
	BP	Subramanian et al., <i>Characterization of Lanthana/Alumina Composite Oxides</i> , Journal of Molecular Catalysts, 69 (1991) pp. 235-245	
	BQ	Taylor, <i>Computer Programs for Standardless Quantitative Analysis of Minerals Using the Full Powder Diffraction Profile</i> , Powder Diffraction, Vol. 6, No. 1 (1991) pp. 2-9	
	BR	Tietz et al., <i>Investigations on Lanthanide-ion-exchanged <math>\beta</math> and <math>\beta'</math>-Alumina</i> , Journal of Alloys and Compounds, 192 (1993) pp. 78-80	
	BS	Tijburg et al., <i>Application of Lanthanum to Psuedo-Boehmite and <math>\gamma</math>-Al<sub>2</sub>O<sub>3</sub></i> , Chapman and Hall (1991) pp. 6479-6486	
	BT	Weng et al., <i>Mechanistic Study of Partial Oxidation of Methane to Syngas Using In Situ Time-Resolved FTIR and Microprobe Raman Spectroscopies</i> , The Chemical Record Vol. 2, pp. 102-113 (2002)	
	BU	Wu et al., <i>Coupled Thermodynamic-Phase Diagram Assessment of the Rare Earth Oxide-Aluminium Oxide Binary Systems</i> , Journal of Alloys and Compounds, 179 (1992) pp. 259-287	
	BV	Zhou et al., <i>Structures and Transformation Mechanisms of the <math>n</math>, <math>\gamma</math> and <math>\theta</math> Transition Aluminas</i> , International Union of Crystallography (1991) pp. 617-630	

Examiner Signature	/Paul Wartalowicz/	Dated Considered	11/22/2010
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